

IN THE CLAIMS:

Kindly amend claims 1-4 as follows. A detailed listing of all claims is as follows.

Claim 1 (Currently Amended): An optical pickup apparatus comprising:

a light source for emitting a light beam;

~~a phase device for providing the light beam with a phase difference between an inner radius portion of the light beam and an outer radius portion of the light beam~~

~~an objective lens for converging the light beam to which the phase difference has been provided and irradiating the converged light beam to be incident on an information recording medium; and~~

a phase device for providing the light beam having been reflected from the information recording medium with a polarization phase difference between an inner light beam and an outer light beam so as to decrease optical interference between the 0-th order light and the diffracted light of the reflected light beam, the inner and outer light beam being inner and outer radius portions of the reflected light beam, respectively; and

detecting portion which detects the inner light beam and the outer light beam to generate at least one of focusing error signal and an aberration error signal of the light beam based on the detected inner and outer light beams means for respectively detecting an intensity of an inner radius portion of the returning light beam and an intensity of the outer radius portion of the returning light beam from said information recording medium, thereby detecting error information of said information recording medium.

Claim 2 (Currently Amended): An apparatus according to claim 1, wherein said polarization phase difference of said phase device is set to a value in a range from $5\lambda/12$ to $7\lambda/12$.

Claim 3 (Currently Amended): An apparatus according to claim 1, wherein said phase device is a variable phase device in which said polarization phase difference is varied.

Claim 4 (Currently Amended): An apparatus according to claim 1, wherein said phase device is a liquid crystal device in which ~~optical phases of~~ relative polarization phase between the inner radius portion and the outer radius portion of the light beam emitted from said light source ~~are~~ is varied in accordance with an applied voltage.

Claim 5 (Original): An apparatus according to claim 1, further comprising an optical device which is provided at an arbitrary position in an optical path between said light source and said objective lens, said optical device separating the light emitted from said light source and the returning light from said information recording medium and supplying said returning light to said detecting means.

Claim 6 (Original): An apparatus according to claim 1, further comprising driving means for positioning said objective lens to a focal point on the basis of said error information detected by said detecting means.

Claim 7 (Original): An apparatus according to claim 1, further comprising a spherical aberration compensation device which is provided at an arbitrary position in an optical path between said light source and said objective lens and compensates a spherical aberration of the light emitted from said light source on the basis of said error information detected by said detecting means so as to suppress an influence of the spherical aberration on the light beam that is caused by a thickness error of said information recording medium.

Claim 8 (Original): An information recording and/or reproducing apparatus having an optical pickup apparatus according to claim 1, wherein information recording or information reproduction is performed by irradiating the light beam on said information recording medium.
